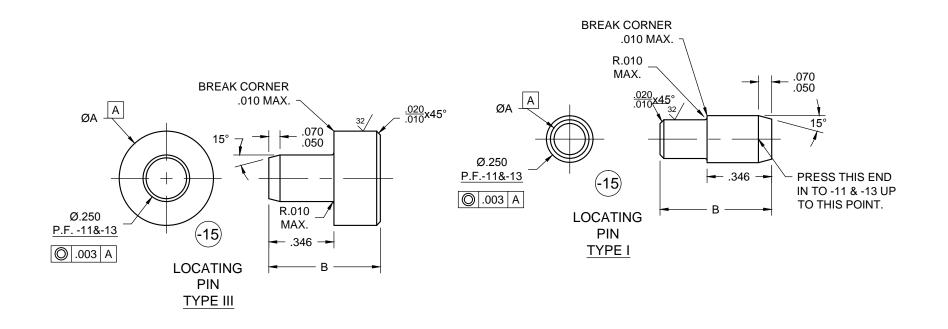


NOTES 1. BREAK ALL SHARP CORNERS (.015/.03).

TOOL#	ØA +.030 030	ØB P.F1	ØC +.020 000	MATERIAL				
KSTKDSY5-5	2.000	1.812	1.506	CDS TUBING	Ø2 x 1/4 wall x 1/2			

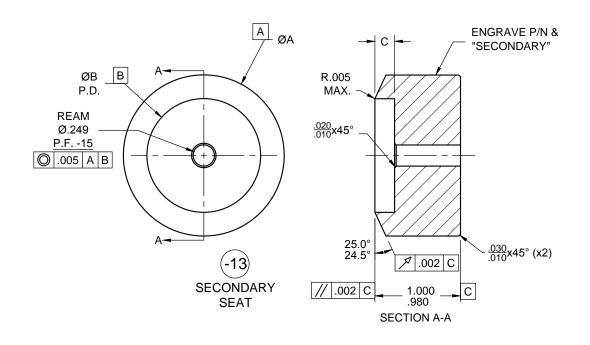
® RED	BARN	I MA	CHIN	ΙE		
TITLE KST SWAGING	KDSY##			TNI		
DWC NO	(566				REV 1	
UNLESS OTHERWISE DIMENSIONS ARE I TOLERANCES ON:	DRAWN BY: PERRITT APPROVED					
	ONS ± 1/32 GLES ±.5°	HEAT TREAT FINISH SPEC BLACK DXIDE				
UNLESS OTHERWISE S 1. BREAK ALL SHARE	EDGES	USED ON BEARING SEE Pg. 1				
.015 x 45° PR .015 2. DIMENSIONAL LIMITS APPLY. SCALE NITS	AFTER PLATING	£ _00	SHEET 10	o.c	10	
N12		5-09	10	Οt	IU	



TOOL#	ØA +.000 002	B +.010 010	PIN TYPE	QTY.	MATERIAL			
KSTKDSY5-5	.309	.710	III	2	1018	RND. BAR	Ø3/8 x 7/8	

<u>NOTES</u>
1. BREAK ALL SHARP CORNERS (.015/.03).

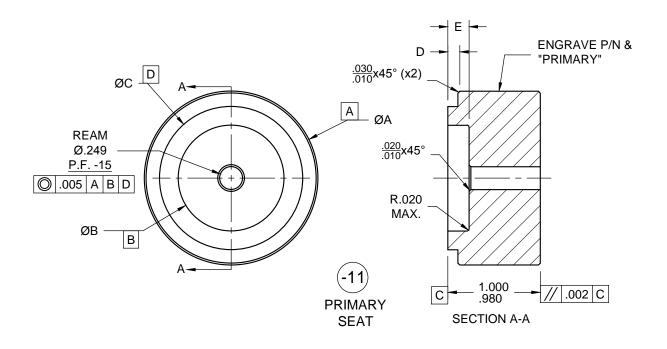
	RB	RED	Br	4R1	1	МД	СН	ΙN	Ε	
TITLE	S) /.	KSTI						. Б	TNI	
DWG N	10	<u>AGING</u>								REV
		100L#	: (<u>c</u>	566	\subset	har	`t)-	-15		1
	UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES						PE	RRI	TT	
	RANCES C		* 11 * 01 12	.0		PROVED				
	± .005	FRACTI	ONS + 1	1/32	HEA TRE	AT				
.XX	‡ .01 ‡ 1		GLES ±.		FIN SPE	ISH C	BLAC	CK [XIDE	
	- X エ : 1 UNLESS OTHERWISE SPECIFIED					US	SED ON B	BEARIN	IG	
	1. BREAK ALL SHARP EDGES .015 x 45° PR .015 R				SEE Pg. 1					
2.		X 45° PR .015 LLIMITS APPLY /		ATING						
SCALI	E N	TS	DATE	2-1	6-	09	SHEET	9	of	10



TOOL#	ØA +.000 020	ØB +.005 000	+.020 000	MATERIAL							
KSTKDSY5-5	1.250	.806	.337	4140 Q&T	RND. BAR	Ø1-1/4 x 1-1/8					

NOTES 1. BREAK ALL SHARP CORNERS (.015/.03).

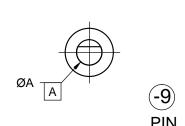
® RED	BARN	1 MA	ACHI	NE			
TITLE KST SWAGING	KDSY##			SEV.	т		
DWC NO	(see				REV 1		
UNLESS OTHERWISE DIMENSIONS ARE I TOLERANCES ON:		DRAWN BY: PERRITT APPROVED					
	IONS ± 1/32 GLES ±.5°	HEAT TREAT FINISH SPEC	BLACK	COXIDE			
UNLESS OTHERWISE S 1. BREAK ALL SHARE	EDGES	USED ON BEARING SEE Pg. 1					
.015 x 45° PR .015 2. DIMENSIONAL LIMITS APPLY	AFTER PLATING		lourer				
scale NTS	DATE 8-1	3-08	SHEET	8 of	10		

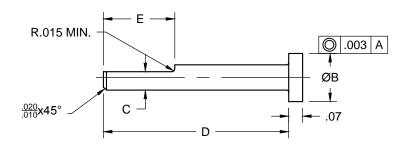


TOOL#	ØA +.000 020	ØB +.005 005	ØC +.002 002	D +.002 002	E +.020 000	MATERIAL				
KSTKDSY5-5	1.250	.760	0	0	.337	4140 Q&T	RND. BAR	Ø1-1/4 x 1-1/8		
					·		•			
						·				

<u>NOTES</u>
1. BREAK ALL SHARP CORNERS (.015/.03).

(RED RED	BAR	V	МΑ	CH	ΙN	E	
TITLE		KDSY##						
	WAGING	<u> </u>	<u> </u>	<u>₹IMA</u>	<u>RY</u>	<u> 2F</u>	<u> </u>	
DWG NO.	TOOL#	‡ (see	· C	har	^t)-	-11		REV 1
TOLERAN			DRAWN BY: PERRITT APPROVED					
DECIMAL .XXX ± . .XX + .	005 FRACTI	IONS ± 1/32 GLES ±.5°	HEA TRE FIN SPE	ISH	BLA	CK [IXIDE	=
	ESS OTHERWISE S	┖	USED ON BEARING					
1.1	BREAK ALL SHARF 015 x 45° PR 015		SEE Pg. 1					
2. DIMEI	NSIONAL LIMITS APPLY							
SCALE	STN	DATE 2-	16-	09	SHEET	7	of	10

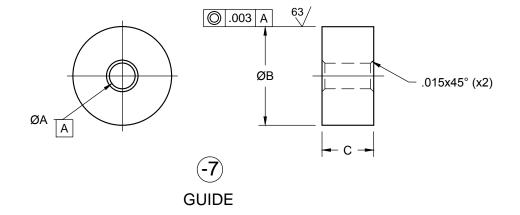




TOOL#	ØA +.000 001	ØB +.005 005	C +.010 010	D +.010 010	+.010 010	MATERIAL
KSTKDSY5-5	.129	.188	.104	.768	.313	MCMASTER-CARR PN: 98378A909

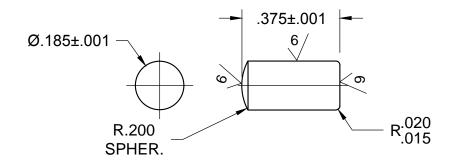
<u>NOTES</u>
1. BREAK ALL SHARP CORNERS (.015/.03).

® RED	BARN	МА	CHIN	1E		
	OSY## ING TO					
DWG NO. T:					REV 1	
UNLESS OTHERWISE SPE DIMENSIONS ARE IN IN TOLERANCES ON:	CHES	DRAWN BY: PERRITT APPROVED				
DECIMALS .XXX ± .005 FRACTIONS .XX + .01 ANGLE X + .1	S ± 1/32 _ 푸	EAT REAT INISH PEC	BLACK	□XIDE		
UNLESS OTHERWISE SPEC 1. BREAK ALL SHARP ED		USED ON BEARING SEE Pg. 1				
015 x 45° PR .015 R 2. DIMENSIONAL LIMITS APPLY AFTE SCALE NTS DAT		-09	SHEET 6	of	10	



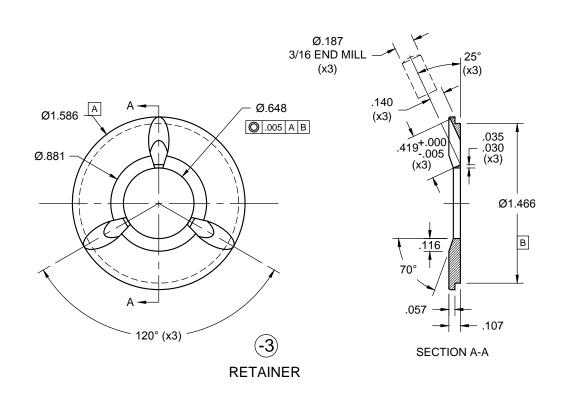
ØA +.001 001	ØB +.000 002	C +.000 010	MATERIAL				
.131	.309	.300	BRONZE RND. BAR	Ø3/8 x 1/2			
	+.001 001	+.001 +.000 001002					

	® RED	В	ARN		MΔ	СН	IV	ΙE	
TITLE			Y##				_		
	SWA	אוזנר	טו נ	<u>⊔∟</u>	<u>ں ز۔</u>	<u>חודס</u>			
DWG NO	TOOL	11 /			1	1.5	_		REV
	T:00L	Ħ (see	. (Ina	rt).	- /		1
UNLESS OTHERWISE SPECIFIED DRAWN BY: PERRITT									
TOLER	DIMENSIONS ARE I ANCES ON:	N INCHE	ES	APF	PROVED				
DECIN				HEA	т.				
.XXX		IONS ±	1/32	TRE	AT				
.XX	.01 AN	GLES ±.		FIN	ISH C				
	: .1 NLESS OTHERWISE	eneciei	ED	USED ON BEARING					
	1. BREAK ALL SHAR	SEE Pg. 1							
	.015 x 45° PR .01	-		SLL I	y. 1				
	MENSIONAL LIMITS APPLY		ATING						
SCALE	NTS	DATE	2-16	5-	09	SHEET	5	of	10



			_						
TOOL#	A +.001 001	ØB +.001 001	(R) C +.002 002	D +.001 001	+.005 000	ØF +.000 005		MATERIA	L
KSTKDSY5-5	-	-	-	1	-	1	.185 MINUS	GAGE PIN	MSC#8901850#

Œ	BRED	BARN	1 M5	CHINE	•		
TITLE	KST	KDSY##	SER	RIES			
SW	AGING T	00L; R[JLLER	(QTY.	3)		
DWG NO.	T·DDL:	# (see	·cha	rt)-5	REV 1		
	SS OTHERWISE		DRAWN BY:	PERRITT			
TOLERANC	ES ON:	IN INCLIES	APPROVED				
DECIMAL:	0.5	IONS ± 1/32	HEAT TREAT				
.XX ± .0	1 AN	GLES ±.5°	FINISH SPEC				
	SS OTHERWISE :	SPECIFIED	U	SED ON BEARING			
	REAK ALL SHARI		SEE Pg. 1				
	.015 x 45° PR .019 SIONAL LIMITS APPLY						
SCALE	NTC 2TIM	DATE 2-1	6-09	SHEET 4 O	£ 10		

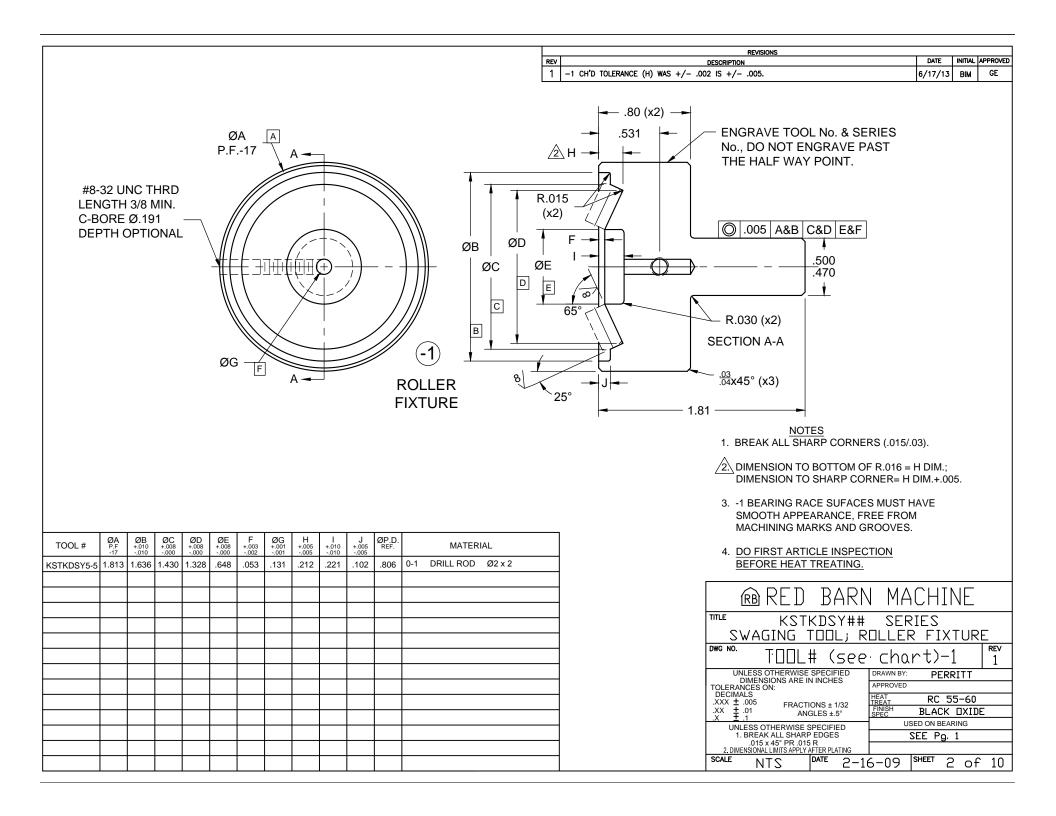


NOTES

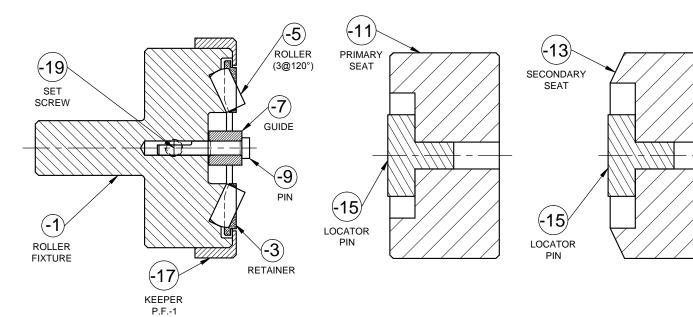
1. BREAK ALL SHARP CORNERS (.015/.03).

TOOL#	ØA +.002 002	ØB +.010 005	C +.010 000	ØD +.002 002	ØE +.002 002	F +.010 010	G +.002 002	+.005 000	ØJ +.002 000	K +.005 000	ØL +.010 005	ØM +.002 002	P.D. REF.	MATERIAL	
KSTKDSY5-5	-	-	-	-	-	-	-	-	-	-	-	-	.806	BRONZE RND. BAR	Ø1-3/4 x 1/4

® RED BARN	N MACHINE					
WE KSTKDSY## SWAGING TOOL						
DWG NO. TOOL# (see	·chart)-3 REV 1					
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES	DRAWN BY: PERRITT					
TOLERANCES ON:	APPROVED					
DECIMALS .XXX ± .005	HEAT TREAT FINISH SPEC					
UNLESS OTHERWISE SPECIFIED	USED ON BEARING					
1. BREAK ALL SHARP EDGES	SEE Pg. 1					
.015 x 45° PR .015 R 2. DIMENSIONAL LIMITS APPLY AFTER PLATING	_					
SCALE NTS DATE 2-1	6-09 SHEET 3 of 10					



	REVISIONS			
REV	DESCRIPTION	DATE	INITIAL	APPROVED
1	-1 CH'D TOLERANCE (H) WAS +/002 IS +/005.	6/17/13	ВІМ	GE



	BEARINGS & TOOLS COVERED							
BEARING #	TOOL#							
KDSY5-5	KSTKDSY5-5							

NOTES

- 1. -5 ROLLERS MUST TURN FREELY IN -3 RETAINER POCKETS.
- 2. -5 ROLLERS & -3 RETAINER MUST TURN FREELY WHEN TOOL IS COMPLETELY ASSEMBLED.
- 3. FLAT END OF ROLLERS MUST FACE TOWARDS THE CENTER OF THE TOOL WHEN ASSEMBLED.

ASSY	В/О	PART#	UNIT	DESCRIPTION	B/O INFORMATION	Pg.	
QIY	БЮ	-1	QTY 1	ROLLER FIXTURE	OR SPECIFICATIONS SEE CHART	2	TITLE KS
		-3	1	RETAINER	SEE CHART	3	TRI-RO
		-5	3	ROLLER	SEE CHART	4	DWG NO.
		-7	1	GUIDE	SEE CHART	5	UNLESS OTHERW
		-9	1	PIN	SEE CHART	6	DIMENSIONS AI TOLERANCES ON: DECIMALS
		-11	1	PRIMARY SEAT	SEE CHART	7	.XXX ± .005 .XX ± .01
		-13	0 or 1	SECONDARY SEAT	SEE CHART	8	.X ± .1
		-15	1 or 2	LOCATING PIN	SEE CHART	9	UNLESS OTHERWI
		-17	1	KEEPER	SEE CHART	10	.015 x 45° PR 2. DIMENSIONAL LIMITS AF
	B/O	-19	1	SOCKET HEAD SET SCREW	#8-32 x 1/4	N/S	SCALE NTS

RED BARN MACHINE

KSTKDSY## SERIES TRI-ROLLER SWAGING TOOLS

DWG NO. TOOL # (SEE CHART ABOVE) 1

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES DECIMALS

OBCIMALS

XXX ± .005 FRACTIONS ± 1/32 IREAT LISTED PER ITEM FRIED FRIE

UNLESS OTHERWISE SPECIFIED

1. BREAK ALL SHARP EDGES

.015 x 45° PR .015 R

2. DIMENSIONAL LIMITS APPLY AFTER PLATING

NTS PATE 2-16-09 SHEET 1 of 10

		REVISIONS									
[REV	DESCRIPTION	DATE	INITIAL	APPR						
	1		-	-	-						

						10		~\	ノ)		® RED BARN MACHIN	IE
AS: Q1	SY ASS	Y Y B/	O PART#	UNIT QTY	DE	SCRIPTION	1			MAT.	B/O INFORMATION OR SPECIFICATIONS	Pg.		
			-1	1	RND	_		X	•	6061	Ø8-1/4 x 3-7/8	2	DWG NO	RE
						17		•					UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ON: DECIMALS	TT
							•						DECIMALS	iL
	ASS			1		· · · · · · · · · · · · · · · · · · ·							1. BREAK ALL SHARP EDGES 015 x 45° PR 015 R 2. DIMENSIONAL LIMITS APPLY AFTER PLATING	of

	REVISIONS									
REV	DESCRIPTION	DATE	APPROVED							

NOT APPROVED FOR PRODUCTION

			PAR	Т#	QTY		DESCRIPTION				
			-1	ı	1						
		DRAWN BY: PERRITT			— \ Г		$D \wedge D M$	$\Lambda \Lambda \Lambda \cap$	LITN	$\overline{\Box}$	
		CHECKED HEAT_		(<u>RB</u>	1 [2	くヒリ	RAKIN	MAL	$\Box\Box\Box$	1	
		TREAT FINISH SPEC		TITLE							
[USED ON MODEL	UNLESS OTHERWISE SPECIFIE DIMENSIONS ARE IN INCHES	D								
	?	TOLERANCES ON: DECIMALS .XXX ± .005 EDACTIONS + 1									
ŀ		XX ± .005 FRACTIONS ± 1 .XX ± .01 ANGLES ±.6		DWG 1	NO.		PART	#		REV.	
f		UNLESS OTHERWISE SPECIFIED 1. BREAK ALL SHARP EDGES)				1 1 11 \ 1	11			
		.015 x 45° PR .015 R 2. DIMENSIONAL LIMITS APPLY AFTER PLATING	3	SCALE		NTS	DATE 1-28-0	06 ^{sheet} :	1 of	1	